

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-137977

(43)Date of publication of application : 01.06.1993

(51)Int.Cl. B01D 65/10  
B01D 65/02

(21)Application number : 03-300026 (71)Applicant : KUBOTA CORP

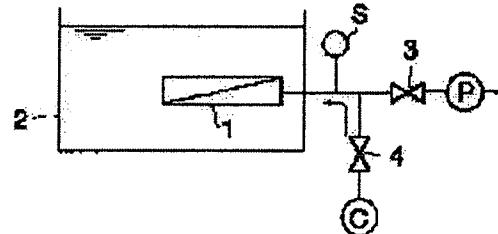
(22)Date of filing : 15.11.1991 (72)Inventor : ISHIHARA KATSURO  
TOKUSHIMA KANJI

## (54) DETECTION OF SEPARATION MEMBRANE BREAKAGE FOR MEMBRANE FILTER

### (57)Abstract:

PURPOSE: To detect whether there is a breakage of a separation membrane in a membrane filter without individual difference by using a backwash air supply device to detect the pressure of the supplied air.

CONSTITUTION: A pump (P) is stopped running and a stop valve 3 is closed. A valve 4 is opened while detecting air pressure by a pressure gage (S) to gradually supply air from a compressor (C) to membrane filter 1. The detected pressure is compared with a bubble point, i.e., the pressure at which a bubble first appears in liquid in the unbroken separation membrane and which was previously measured. That is to say, when the detected pressure is not less than the bubble point, the separation membrane is judged unbroken. When the detected pressure does not reach the bubble point with air continuously supplied, the separation membrane is judged that it is broken or it leaks from the fitting part. Thus whether there is a breakage of the separation membrane is surely recognized.



### LEGAL STATUS

[Date of request for examination]

24.02.1995